DOCUMENT RESUME

ED 140 651 FL 008 651

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TITLE Listening Fluency Before Speaking: An Alternative Paradigm.
PUB DATE Apr 77
NOTE 22p.; Paper presented at the Foreign Language Conference (University of Kentucky, April 1977)
AVAILABLE FROM Learning and Evaluation Service, 17 Morrill Hall, Michigan State University, East Lansing, Michigan 48824.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Audiolingual Methods; Aural Learning; *Educational Objectives; Higher Education; *Language Instruction; Language Skills; Learning Processes; *Listening Comprehension; *Listening Skills; Literature Reviews; Neurolinguistics; Psycholinguistics; Secondary Education; *Second Language Learning; *Teaching Methods

ABSTRACT

The foreign language instruction in the United States has followed a paradigm commonly called the "audio-lingual" method for almost twenty years. This paradigm is basically response-oriented and based upon structural linguistics and behavioral psychology. It focuses attention on speaking as the primary skill. It has not lived up to expectations. Some people have suggested the cognitive- code learning approach as an alternative. However, many who profess this approach still equate learning a language with learning to talk in that language. Through a review of the literature on language teaching, learning psychology and brain research, it is suggested that language teaching should shift its focus from speaking to listening as the primary skill. The paper presents evidence of positive transfer from listening to the other language skills and evidence of negative transfer when speaking is the initial and primary language skill taught. The paper also explores the potential values to be found in concentrating the research efforts and teaching practices on the phenomenon of listening fluency. What emerges from an analysis of selected experiments and research findings is a recognition that the basic paradigm needs to be reassessed and some basic assumptions need to be questioned. It must be decided whether the focus should be on expressive skills or receptive skills. (Author/CFM)

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LISTENING FLUENCY BEFORE SPEAKING: AN ALTERNATIVE PARADIGM

James R. Nord

April 1977

Any community of people hold in common certain assumptions about reality. Each scientific community of physicists, linguists, psychologists or others shares an additional set of implicit assumptions called the paradigm by Thomas Kuhn.[1] This paradigm is the shared conceptions of what is possible, the boundaries of acceptable inquiry, the focus of attention, and the limiting cases. The development of a successful paradigm enables a scientific community to explore jointly one well-delimited area of inquiry, to share criteria for the selection of problems, and to allow a number of local road maps to be drawn, tested, and validated by many independent researchers.

For approximately two decades, much of the foreign language instruction which took place in the United States followed a paradigm commonly referred to as the "audio-lingual" method and occasionally referred to as the "New Key" in language teaching. The new paradigm was based upon those theories of structural linguistics and behavioral psychology which saw a child learning a language by social reinforcement of correct speech habits, and the assumption that language, as an habitual oral behavior, was best acquired through oral practice. These assumptions were manifested as intensive spoken pattern drills, dialogue memorization and other habit forming exercises.

The paradigm did not live up to expectations. A smaller percentage of students are now taking foreign language courses in a formal school setting.[2] Those who take courses often quit before they are proficient. The dropout rate for students taking foreign language courses in a formal school setting is 70 percent after only two years of study and 90 percent after three years of study.[3] The lack of holding power of the new approach created doubts, stirred

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controversy and generated many suggestions. Carroll has suggested the cognitive code learning approach as an alternative.[4] Unfortunately, as pointed out by Postovsky,

> "...some proponents of the cognitive theory of language acquisition, while rejecting the mechanistic approach to language teaching, still adhere to the behavioristic view of language as a phenomenon. To them, language is still 'talk.' It may be defined as 'communicative competence and performance,' but conceptually it is exactly the same as verbal behavior. It logically follows this essential behavioristic premise that language learning is equivalent to learning to talk."[5]

It is with some reluctance that I suggest that now may be the time to change the paradigm, to change from speaking to listening as the focal skill, to change from a response-oriented learning paradigm to an input, or stimulus-oriented learning paradigm. "The success of a paradigm," writes Kuhn, "is at the start largely a promise of success discoverable in selected and still incomplete examples. Normal science consists in the actualization of that promise, an actualization achieved by extending the knowledge of those facts that the paradigm displays as particularly revealing, by increasing the extent of the match between those facts and the paradigm's predictions, and by further articulation of the paradigm itself."[6]

This paper will try to provide some selected and still incomplete examples of the potential value I believe can be found in concentrating our research efforts and our teaching practices on the phenomenon of listening fluency in foreign language learning. As my opinion may appear new and at odds with the vast majority of researchers and practitioners in the field, it is only from a persuasion that it is right and holds considerable promise that I bring it before you. Since my opinion may be different from many professionals of greater fame and repute, I hesitate to counter them, yet my sense of duty as a scholar makes me obliged to present to you at least some of the facts, research and logical argumentation which have convinced me of its correctness. After you have heard my reasoning and weighed my evidence, you may judge my conclusions; and your

judgment may possible change mine. Until then, I ask you to "listen" with patience and without prejudice.

What is the new paradigm? Simplistically, it asserts that listening should be taught first and foremost, that oral response should be delayed until listening fluency is well started.

Asher has recommended that "...For at least one semester in college or six months to a year in high school, the goal of foreign language learning should be listening fluency only."[7] The listening fluency should be so keen that when the student visits Mexico, he can understand almost anything he hears on the street, on television, or on the radio. When this level of comprehension is achieved, the student may be ready for a graceful transition to speaking Spanish. Winitz and Reeds completely agree with this position.

> "It is a well documented fact that comprehension procedes speaking in the young child....We regard this sequence of development--comprehensive first, production second,--a functional property of the human brain, which should not be violated in language instruction. Therefore, we take the point of view that foreign language instruction should discourage speaking until a high degree of comprehension is achieved, that is until the student can understand a non-technical conversation and decode it with ease."8

For those who are strongly response oriented, who believe that some sort of speech training is required to learn correct speech, Winitz is clear and uncompromising. "One may ask, is speech production not taught at all? Our answer is an emphatic yes."[9] Winitz makes a clear distinction between allowing students to speak and forcing students to speak.

> "Speech should be responded to appropriately by clinicians since language will often be used by children to indicate understanding... however, we do not recommend mimicry, pattern drills or chaining of words as clinical techniques."10

Postovsky recognized that speaking was not necessary for the learning of other language skills when he was first involved with a Russian course for stenographers. The course was primarily one of listening to Russian and writing down what was said. While the teaching itself required no speaking, Postovsky was surprised at the conclusion of the course when he found that the

"stenographers" could not only listen to and write Russian, they could also speak it. What startled Postovsky the most was that in conversations between the "stenographers" and students from his own "audio-lingual" class, the "stenographers" often spoke Russian with a better pronunciation and with less grammatical mistakes than the members of his regular "audio-lingual" course.[11] His findings led him to prepare a course in which oral response (speaking) was delayed for 180 hours, and then introduced only gradually--no more than 25 minutes out of a six hour day at first, and finally up to 90 minutes out of a six hour day at the end of the course.

The "audio-lingual" paradigm, including modern modifications of it, involves listening. But in the classroom focused on speaking, a student "listens" not so much to comprehend as to mimic (in repetition drill) or to respond in correct form (in pattern response drill). Active oral response has and continues to receive far more attention than aural comprehension.

Problems arise in achieving functional listening ability when a course is developed according to the "audio-lingual" approach and focuses on "oral production" rather than on "aural comprehension." Even the basic materials are not readily useful for a listening approach. First, the emphasis on speaking severely limits the amount of listening comprehension normally taught since it restricts the exposure of vocabulary and structure to those which can and should be spoken. It also limits the type of listening which can be practiced. In most courses oriented to the productive mode of speaking, the vocabulary selection is based less on the actual frequency of use and more on the "utility" from the point of view of the speaker. Finally, the rate one can learn listening comprehension is restricted by the rate at which one can learn to speak, generally a much slower rate.

Many of the early advocates of the "oral approach" recognized the distinction between listening and speaking or receptive and productive skills. Fries, for example, pointed out,

> "The two complementary aspects of communication are recognized in the two phrases 'oral production' and 'receptive understanding.' It seems important to recognize the fact that one's mastery of any language--even of one's own native language--is always on two major levels, production and recognition."12

He went on to point out,

> "These two levels are pratically never equal. The range of 'words' that we can recognize and understand exceeds that of the 'words' we actually use in speech or even in writing."13

Then, however, he rejected the distinction from any but a conceptual point of view. He stated,

> "This recognition of the differences between the productive and the receptive controls of the language does not imply a mechanical separation of the materials into 'practices' in producing for the sake of production only and 'practices' in recognition for the sake of receiving only."14

And then he expressed the primary position of the behaviorist school of learning, the basic assumption of the speaking paradigm. "As a matter of fact, practice in production is one of the best means of developing recognition."[15]

This assumption that "practice in production [speaking] is one of the best means of developing recognition [listening]" is not a "matter of fact." It is an opinion held by many. It is a theoretical position used to justify a general practice. But it is not a matter of fact or data. This paper will argue the other point of view, that "...listening carefully in order to hear accurately may be used to advantage in learning to produce,"[16] but that speaking before understanding can be detrimental. There appears to be extensive evidence to support the positive transfer from listening to speaking. There also appears to be some evidence of negative transfer from speaking to listening.

Simon Belasco writes that at the end of the 1960-61 Pennsylvania State University French Institute, he was "jolted by the realization that it is possible to develop so-called 'speaking' ability (vocalizing) and yet be virtually incompetent in understanding the spoken language."[17] For many years, investigators of child behavior have noted that when children learn their first language, listening

comprehension of many complex utterances is demonstrated before these children produce any intelligible speech.[18] There are also cases of youngsters, who because of congenital disability, can never learn to speak; yet they learn to comprehend and are not prevented from comprehending the language because of their inability to speak.[19] On the other hand, children with listening difficulties, such as deafness, have very great difficulties ever learning how to speak.

The potential transfer of learning from listening to all of the other skills stands out as one of its advantages. In an experiment focused on listen comprehension of German, Asher required no speaking whatsoever.[20] Instead, he required the students to respond to oral stimuli with a movement of the body. For example, the student was told: "Go to the table and pick up the mirror!" The requests started simply and were first modelled by the instructor. Later, the vocabulary and structure became more complex. Some vocabulary, particularly abstract words, were written on cards and manipulated as objects. Asher noted that after 16 hours of instruction, some of the students on their <u>own</u> volition pressed the instructor to let them speak. Once listening comprehension was achieved, transfer to the speaking skill was rapid. Transfer to the other skills was also rapid. In regard to reading, Asher noted,

> "Although the experimental subjects far excelled the controls in listening skill, it was expected that perhaps the reverse would be true for reading skill. Since the training emphasis of the control group was reading and writing, we expected these students to have significantly higher reading comprehension scores. The results, using a 37 item reading test, showed no significant difference between groups. Surprisingly, even though the experimental subjects had no systematic training in reading, there was enough positive transfer from listening skill to make both groups quite similar in their reading achievement."21

Feeling that the study by Asher was somewhat difficult to interpret, Reeds, Winitz and Garcia set about to develop an experiment in which the amount of reading transfer was assessed for students whose foreign language experience was precisely controlled, and for whom the reading examination reflected almost exactly the grammatical and lexical complexity of the listening comprehension

lessons.[22] The students were taught to comprehend German and then the amount of transfer to reading was measured. The results of this study and of Asher's research indicate that reading transfer is high following listening comprehension. The researchers believe that a significant amount of reading skill can eventually be acquired even when practice in reading is not emphasized.

> "The findings of this study suggest that skill in reading need not be emphasized in language courses from the outset when the student is in the process of mastering basic syntactic and phonological patterns--and before he has acquired about 5,000 words (see Winitz and Reeds, 1975). Our position regarding reading is made with reference to training in listening comprehension, and our generalizations are restricted to this method."23

In an interim field test report of his most recent experimental course, Postovsky generally reconfirmed the transfer value of listening to the speaking skill. He was less certain about the transfer from listening to writing. With respect to the transfer hypothesis, he proposed that "training in oral comprehension (i.e., in processing of auditory input) activates deep structure elements but tends to bypass surface elements, particularly if they are redundant."[24] A similar phenomenon occurred in the Justin Morrill College intensive Russian program at Michigan State University.[25]

The students' productive encoding use of the language, both in speaking and in writing, indicated a lack of familiarity with certain parts of the language, particularly case endings in Russian. It was noted that what Beckmann has referred to as information morphemes,[26] and Brown has called contentives,[27] seemed to be well learned. This also seems to be what Postovsky was referring to when he said deep structure. It was the functors,[28] check morphemes[29] or surface structure which seemed to cause the greatest difficulty in the encoding process. While the Michigan State University project noted a phenomenon similar to that which occurred at the Defense Language Institute, and the explanation for the phenomenon seemed similar, the reaction was quite different. Rather than return to some oral practice in order to develop control over the surface structure as suggested by

Postovsky, the MSU intensive Russian program preferred to create additional listening materials which would develop greater listening discrimination of the check morphemes or surface elements themselves.[30]

The preference toward increased discrimination training rather than reverting to the oral response mode was based upon learning principles derived from evidence outside of language learning; but principles which are general enough to be applied in almost all learning circumstances. The basic principle is that stimulus learning is easier and faster than response learning, and therefore a more efficient and effective paradigm to operate under.

This is contrary to some basic assumptions of some leading learning theorists. Most conditioning theorists have generally agreed that arranging for the learner to make an appropriate response so that it can be reinforced, is central to the problem of teaching. Kendler, for example, stated "Once the characteristics of the to-be-learned response are specified, the task becomes one of getting the student to make it, explicitly or implicitly, in the presence of the appropriate stimulus."[31] Similarly, Glaser's view that "response is the primary object of manipulation in instructional technology"[32] seems to call for such an emphasis.

But this paradigm, while very popular, has not been held by all theorists. Mowrer in 1960 cast doubt upon the response-oriented connectionist position.

> "According to Thorndike's view, an organism can learn only what it <u>does</u>, i.e., a particular stimulus-response connection has to 'occur' before it can be strengthened (or weakened); but experiments on latent learning and extinction, insight, and other mediated forms of behavior modification (see Chapter 2) have shown that learning can occur <u>without</u> 'doing,' thus impugning the generality of the connectionist position."[33]

Gagne' questioned the assumption that "The best way to learn a performance is to practice that performance."[34] This assumption was challenged by Gagne' on the ground that in the kind of training he was analyzing, "the responses required (turning switches, inserting plugs, moving handles) do not have to be learned at all--they are already there in the human's repertoire."[35] He found that major

improvement in Gunnery came not from practicing the response but from "informing the learners of the correct picture to be achieved in ranging,"[36] i.e., by teaching the perceptual aspects of the task.

In several other studies there is evidence that a focus on the receptive skills has decided advantages over a focus on response practice; and that discrimination training can be used in place of response practice to help shorten the total learning time. For example, in one research study[37] the researcher believed that teaching the students to observe more accurately would help them guide their own behavior. He gave preschool children practice in discriminating well formed numbers from those which were badly formed. It was found that these children were able to write the numbers well much sooner than those who had been given either response guidance or response practice from the beginning. Similar techniques have been used to teach machine operation.[38] By using discrimination training to show proper equipment setup, the students first learned the proper appearance of the outcome and, thus, were able to monitor their own behavior in acquiring the skill. This same procedure has also been applied to problem-solving in mathematics.[39] This technique allows the student to interact with the uniqueness of each problem and avoid the redundancy of problem solving, thus reducing long response practices and reducing overall time of learning. This stimulus-oriented approach is the heart of the Suzuki talent education method.

> "...The child receives a recording of the music in Volume 1. His instructions are to listen to the recording as often as possible. This listening may take place while the child plays, during his meals, or at bedtime as he is awaiting sleep. Absorption occurs without static attention, and this music will soon assume the status of an old friend...perhaps in the category of a much loved blanket or stuffed animal! As he begins to play the music he has been listening to, he will have an oral memory to aid his physical learning and a built-in error recognition system that should be infallible."40

A research study, also in music, reports on the general transfer process from an input discrimination task to an output response task.[41] What may be active when we shift our focus from speaking to listening is a transfer based upon the

phenomenon known as stimulus predifferentiation.[42] Much of the productive research on stimulus predifferentiation was stimulated by Eleanor Gibson's famous discrimination hypothesis which asserted that,

> "A major necessity of verbal learning is the establishment of discrimination among the items to be learned, and that this process of discrimination is actually a fundamental part of what is called generally the learning process."43

There may also be some sort of a buildup of a cognitive structure which will self-monitor other more overt behavior. Mowrer indicates what might be the mechanism.

> "If we now adopt the 'feedback' conception of habit, which holds that behavior is 'selected' and 'guided' by the positive and negative emotions which have become conditioned to response-correlated stimuli, skill reduces to a matter of discrimination.
>
> "Evidence from many sources now suggests that the musical virtuoso, the athletic prodigy, or the 'artist' in some other type of behavior differs from the duffer mainly in being able to make fine distinctions (discriminations) between the feedback from a performance that is exactly right and one that is only approximately so."44

And Gilbert reinforces this same concept.

> "It is in this way that theory, as a repertory of selective observing behavior, can produce the great flexibility, speed, accuracy, and resistance to forgetting that is characteristic of old pros in every line of endeavor. It was such a simple theory that guided Ty Cobb to select, from a mass of motion, certain eye and body movements that made his baseball skill seem uncanny to the opposition. The occasional youth who seems blessed with a genius that allows him to bypass the long years of slow accretion of experience, has somewhere learned where to look at the right time and to ignore myraid irrelevant details."45

Evidence for the transfer value of listening comprehension appears to be far stronger and more extensive than evidence of transfer from other skills. And while it is becoming more and more clear that there is positive transfer from listening to speaking and reading, evidence is also accumulating which indicates that being forced to speak too soon has negative transfer value.

The requirement to respond orally, as in the mimicry-memorization drills of the audio-lingual approach, imposes listening for speaking and it results in impaired listening comprehension. This problem was treated in a short experiment by James Asher which involved the performance of drill movements by command in

Russian. Asher found that the students who merely performed the commands did so with a greater degree of reliability than those who first repeated the commands orally before performing the necessary movement. He concluded that,

> "...the stress of trying to pronounce the alien utterance may retard listening fluency....The optimal strategy may be serial learning in which one achieves listening fluency just before one attempts to speak."46

There is other experimental support for this same position. In a study on the associative reaction time in language acquisition, Ley and Locascio state,

> "Our research suggests that one must make associations to verbal materials during learning in order that the material can be later recalled, and that some procedure such as repeatedly saying the material aloud interferes with the associative process, and therefore has a detrimental effect on learning."47

Part of the explanation for these results may be the role that stress and anxiety play in the learning process. Anxiety, often brought on by task overload, can be a major deterent to the learning of listening comprehension. The effect of anxiety on learning in general has been widely studied. Eysenck points out that,

> "...conditioning is related to anxiety for the simple reason that it has been shown conclusively that the ease with which a conditioned reflex is formed depends very much on the anxiety of the person on whom the experiment is being performed. What is more, there is a good deal of what is called 'stimulus generalization' in the anxious person."48

Any discrimination learning is much more difficult for an anxious person. Therefore, any receptive skill such as listening and reading which is primarily discrimination learning, is made more difficult through task overload and the corresponding anxiety which is created.

There are numerous studies which indicate that forcing a student to respond orally--to speak before he has a good foundation, before he is ready--is a major cause of poor articulation, accent and grammatical control. This generally results from practicing speaking while task overloaded. Even imitation is a very complex task and can create task overload.

> "At a minimum, it can be shown that imitation requires perception, storage, organization of output, and motor output. In addition, before the storage phase there will be interaction if the material is interpretable."49

In a study which reviewed a large number of experimental reports within the aerospace industry, Greer et al. point out that when a subject is task overloaded, errors increase and there is a tendency to revert to previously learned generalizations rather than make the specific distinctions required at that point.[50] As Gaier has expressed it,

> "...it leads to an impairment in the ability to improvise in an unstructured and/or new situation. This results in stereotyped, habitual and familiar approaches that may be maladaptive in the situation."[51]

In foreign language learning, this means that as a person becomes task overloaded by trying to speak and say more than he is able to, he will revert back to the habit formations he knows best, those of his native tongue. The results are speaking the words of the new language with sound habits and/or grammatical patterns of the old language. If done often enough in this state of task overload, they become habits transferred to the new language. The practice of insisting upon speaking in the early stages has also been identified as one cause of the high dropout rate.[52]

The evidence for a reduced emphasis on speaking and an increased focus on listening fluency has been gathered from a wide range of research and experimentation. Most of the evidence has been on language performance, on the public demonstration of the language phenomenon. Is there anything in the recent brain research to contradict this evidence? Or, does it also support a listening fluency paradigm?

Speech is controlled in the left brain by the part of the brain known as Broca's area. Damage to this area causes aphasia in which the sufferer "can utter at most only one or two slurred words."[53] Yet we know this is brain damage, not muscular damage because the same person "may be able to sing a melody rapidly, correctly and even with elegance."[54] This is possible because music is controlled by the right hemisphere of the brain. Comprehension, on the other hand, is controlled by the part of the left brain known as Wernicke's area. "A person with

Broca's aphasia may have an essentially normal comprehension of language"[55] but "a lesion in Wernicke's area can produce a severe loss of understanding, even though hearing of nonverbal sounds and music may be fully normal."[56] Speaking and listening are related. There is, as pointed out by Lashley, "too much in common to depend upon wholly different mechanisms."[57] And indeed the two areas are normally connected. "We now know that the two areas are connected by a bundle of nerve fibers known as the arcuate fasciulus. One can hypothesize that in the repetition of a heard word the auditory patterns are relayed from Wernicke's area to Broca's area."[58] "When the arcuate fasciculus is damaged, speech is fluent but abnormal and the patient can comprehend words but cannot repeat them."[59]

Brain research such as this indicates that learning to sing a song and learning to speak involve quite different mechanisms, in fact, they involve two different hemispheres of the brain. This research also points out that learning to listen involves brain mechanisms which are distinctly different from the mechanisms involved in learning to speak. Finally, this research helps us understand how the transfer from listening to speaking is readily achieved while transfer from speaking to listening involves no direct brain connection.

> "We can now deduce from the model what happens in the brain during the production of language. When a word is heard, the output from the primary auditory area of the cortex is received by Wernicke's area."60

> "Understanding the spoken name of an object involves the transfer of the auditory stimuli from Heschl's gyrus (the primary auditory complex) to Wernicke's area and then to the angular gyrus, which arouses the comparable visual pattern in the visual association cortex."61

The comprehension involves more than just the visual association cortex, although that may be the major associational cortex. One of the great advantages of the total physical response strategy suggested by Asher[62] may be its development of multiple associational cortex interactions with the Wernicke area including kinesthetic associations. Comprehension thus is involved with only the Wernicke area and its meaningful association with the rest of the brain. Speech, on the other hand, is triggered from the Wernicke area and can be independent of meaning.

> "If the word is to be spoken, the pattern is transmitted from Wernicke's area to Broca's area where the articulatory form is aroused and passed on to the motor area that controls the movement of the muscles of speech."63

A remarkable case of aphasia has provided striking confirmation of Wernicke's model. Were it not for its tragic reality, this account might be considered a parody on the parrot-like mimicry memory drills of the early "audio-lingual" movement. Geschwind describes the case of a woman who had suffered from accidental carbon monoxide poisoning which destroyed the cortex surrounding Wernicke's area (the area which provided meaning) but left intact the cortical structure related to the mechanical production of language (Broca's area, Wernicke's area and the connecting area).[64]

> "During the nine years we studied her she was totally helpless and required complete nursing care. She never uttered speech spontaneously and showed no evidence of comprehending words. She could, however, repeat perfectly sentences that had just been said to her. In addition, she would complete certain phrases. For example, if she heard 'Roses are red,' she would say 'Roses are red, violets are blue, sugar is sweet and so are you.'"65

How many of us have heard our students parroting back whole long phrases once we started it for them? How many times have we been startled to find they don't understand a word they have spoken when it comes out of the mouth of a native speaker?

> "...The woman could not comprehend speech because the words did not arouse associations in other portions of the cortex. She could repeat speech correctly because the internal connections of the speech region were intact. Presumably well-learned word sequences stored in Broca's area could be triggered by the beginning phrases."66

Presumably mimic-memory drills can build up and store well learned word sequences in Broca's area, but there is serious question about their help in comprehending those same audio forms. Also, the learning of songs and singing may be an excellent motivational device, but it should not be confused with the learning of the speech aspect of language learning. Music is controlled primarily in the right hemisphere and speech in the left. When brain damage is in the left hemisphere, as in this case, speech is effected but not singing.

> "...A song that had been written after her illness would be played to her and after a few repetitions she would begin to sing as soon as the song started. If the song was stopped after a few bars, she would continue singing the song through to the end, making no errors in either words or melody."67

The direct teaching of listening fluency involves building up associational relations between Wernicke's area and meaningfulness in other parts of the brain. The focus of most of the listening fluency researchers in the field has been on developing these form-meaning associations in the brain. Asher, for example, has used the total physical response strategy[68] as his primary means of developing these associations. Gary[69] has also used this technique. Gauthier used bilingual teachers and allowed students to respond in either language.[70] Nord has used visuals extensively in a generalized technique known as the Sens-it Cell.[71] Winitz and Reeds[72] also use visuals extensively. Postovsky[73] had the students write down the words as they heard them. He also used visuals more extensively in his later experiments. Most of the researchers have also noted novel expressions were spontaneously generated once listening fluency reached a critical mass or nucleation stage.[74] Asher, for example, has pointed out, "As listening comprehension develops, there is a point of readiness to speak in which the child spontaneously begins to produce utterances."[75] Nord has also noted that students generate novel expressions spontaneously once listening fluency develops.[76]

In practical terms, the utility of listening comprehension has seldom been challenged but rarely fully understood. Over ten years ago Belasco said, "Aural comprehension is the most underestimated and least understood aspect of foreign language learning today."[77] It is still true today. In order to handle even a simple free conversation, an individual must have a much broader competence in listening comprehension than in speaking. When speaking a language, a learner can manipulate a relatively narrow range of vocabulary at his own pace to express an idea. However, when listening to a reply, he no longer controls the choice of vocabulary, the structure employed, nor the rate of delivery. He must be prepared

to assimilate those words which are part of the speaker's active vocabulary and he must adjust to the speaker's rate of speaking. This requires much greater fluency in listening than in speaking. This is especially the case when conversing with a native speaker of the language.

What is emerging from an analysis of these experiments and research findings is a recognition that we need to relook at our basic paradigm, to question some of our basic assumptions, to ask ourselves whether our goal and our focus should be the receptive skills or the expressive skills.

The focus on speaking in foreign language instruction for the past twenty years has, I believe, been detrimental to the field. It has been detrimental not just because it now appears less effective or efficient, but rather because of its corrosive effect. By concentrating public and professional attention on dramatic overt behavioral changes which could be observed by anyone, the focus on speaking has also succeeded in diverting attention away from the more elusive, but more fundamental changes which are going on inside the mind as one learns to "listen" and "think" in a foreign language. The focus on learning to speak has diverted attention, research and money away from the development of theories, methodologies and instructional materials for learning aural comprehension.

You have listened with patience and, I believe, without prejudice. I have presented a small, but I believe sufficient, token of the evidence available. My judgment indicates we need to change the paradigm; I now await your judgment. Thank you.

FOOTNOTES

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